Technical methods

Use of dry fixative slides for exfoliative cytology

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Fixatives which are in general use in laboratories for diagnostic cytological work all have certain disadvantages. Ether-alcohol mixtures or iso-propyl alcohol have to be available in the clinic or consulting room and it is usual for the smears to be placed with polythene containers filled with fixative for transport to the laboratory. Spillage is often a hazard and there are objections to the smell as well as to the inflammable properties of ether. The aerosol type sprays are expensive and in our experience require skill in manipulation if good results are to be obtained.

Amies and Garabedian (1965) have described the preparation of fixative slides for the diagnosis of *Trichomonas vaginalis* and stated that these might be useful in the field of diagnostic cytology. We decided therefore to give these slides a trial for cervical and vaginal smears and have now been using them for several months in parallel with ether-alcohol fixed slides. They are equally satisfactory as regards fixation and staining, using the standard Papanicolaou technique. The slides are prepared, several hundred at a time, by dipping 3×1 in. glass slides into the following freshly prepared solution:

Ethanol 30% v/v aqueous solution	..	100 ml.
Mercuric chloride		5.0 g.
Sodium acetate		1.0 g.
Sucrose		5.0 g.

The slides are drained and allowed to dry in special racks. Precautions must be taken in the preparation of the slides to avoid any risk of dermatitis to the operator. (These slides may soon be available commercially.) Smears are made in the usual way on to the prepared slide and allowed to dry.

We thought it worthwhile drawing the attention of others concerned in this field to what we think is an important advance in technique which may well affect the whole policy of cytology centres.

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REFERENCE

Amies, C. R., and Garabedian, M. (1965). *J. clin. Path.*, 18, 27.

A mixer for slide cell agglutination¹

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The classical method for testing red cells for agglutination against antisera on a slide is either to rock the slide manually or to examine it in a specially designed rocking rack with background illumination. The disadvantage of the latter is that the rocking motion is in one direction only; when the slide is held in the hand the rocking is usually in a rotating manner. In a transfusion laboratory many procedures are carried out on slides and although sensitization may take place without agitation enhancement of agglutination is always achieved by mixing the cells, usually by some form of rocking. If this is carried out manually considerable technical time may be wasted. We have therefore designed a simple machine which reproduces as nearly as possible the rotating rocking motion produced by the majority of workers when carrying out the technique manually. The components used in the assembly of this machine are readily obtainable and its construction is well within the competence of the majority of workshops. If manufactured in this manner its cost is relatively small. It has been found invaluable for ABO slide grouping of red cells which we carry out as a routine screening procedure and for the final stage of the direct and indirect antiglobulin test. We have also found it useful in the performance of mixed cell antiglobulin tests. For tests using red cells we

¹A working drawing with the specification of the components used is available from the author.

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